

(72) JOHNSON, BARBARA S., US

(71) COUNTRYWIDE BUSINESS ALLIANCE, INC., US

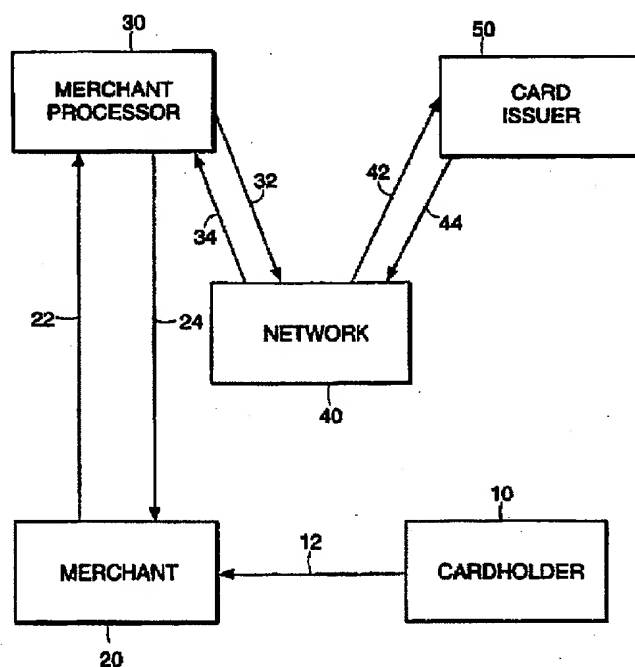
(51) Int.Cl.<sup>7</sup> G07F 7/10, G07F 7/00

(30) 1997/07/09 (08/890,398) US

(30) 1998/03/23 (09/046,062) US

(54) **SYSTEME ET PROCEDURE DE PAIEMENT AUTOMATISE**

(54) **AUTOMATED PAYMENT SYSTEM AND METHOD**



(57) L'invention concerne des systèmes et procédés de paiement automatisé faisant appel à des systèmes d'autorisation de prélèvements de consommateur, de compensation et de règlement pour permettre à un commerçant de réduire ou de supprimer une somme due à une autre entité pour des services, des produits et/ou des avances de fonds fournis au commerçant. Après l'acceptation d'un identificateur de consommateur (par exemple un numéro de compte de carte de crédit, de débit, à puce, de paiement, etc.) comme paiement par le consommateur, les données relatives au paiement sont transmises à un processeur commerçant. Le processeur

(57) Systems and methods for automated payment involve utilizing consumer payment authorization, clearing, and settlement systems to allow a merchant to reduce or eliminate an amount owed to another entity for services, products, and/or cash advances provided to the merchant. After a customer identifier (e.g., a credit, debit, smart, charge, payment, etc. card account number) is accepted as payment from the customer, information related to the payment is forwarded to a merchant processor. The merchant processor acquires the information related to the payment, processes that information, and forwards at least a portion of the





(21) (A1) **2,295,615**  
(86) 1998/06/26  
(87) 1999/01/21

commerçant acquiert les données relatives au paiement, les traite et transmet au moins une partie du paiement à un destinataire comme paiement d'au moins une partie de la somme due par le commerçant. Le destinataire reçoit la partie du paiement transmise par le processeur commerçant et transfère cette partie sur la somme due par le commerçant afin de réduire ou de supprimer le montant impayé.

payment to a receiver as payment for at least a portion of the amount owed by the merchant. The receiver receives the portion of the payment forwarded by the merchant processor and applies that portion to the amount owed by the merchant to reduce or eliminate that outstanding amount.



**PCT**WORLD INTELLECTUAL PROPERTY ORGANIZATION  
International Bureau

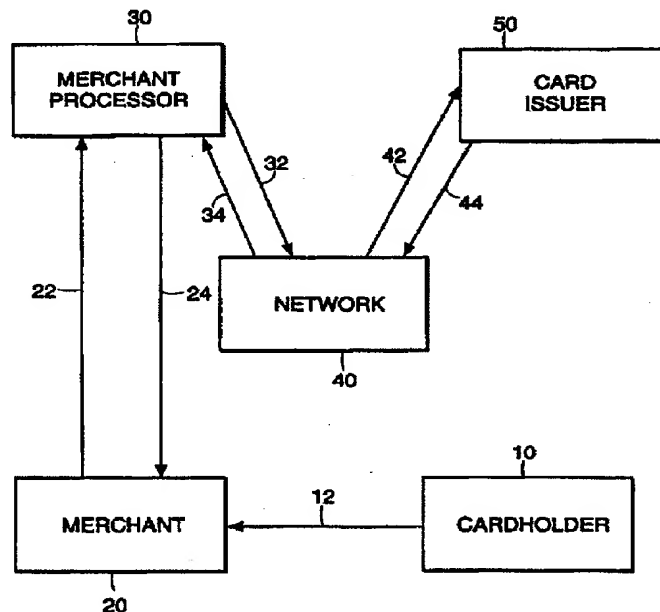
## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>G07F 7/10, 7/00</b>		<b>A1</b>	(11) International Publication Number: <b>WO 99/03076</b>
			(43) International Publication Date: 21 January 1999 (21.01.99)
(21) International Application Number: <b>PCT/US98/13293</b> (22) International Filing Date: 26 June 1998 (26.06.98) (30) Priority Data: 08/890,398      9 July 1997 (09.07.97)      US 09/046,062      23 March 1998 (23.03.98)      US (71) Applicant: <b>COUNTRYWIDE BUSINESS ALLIANCE, INC.</b> [US/US]; 104 Springfield Center Drive, Woodstock, GA 30188 (US). (72) Inventor: <b>JOHNSON, Barbara, S.</b> ; 1051 Cedar Road, South- port, CT 06490 (US). (74) Agent: <b>TOSTI, Robert, J.</b> ; Testa, Hurwitz & Thibault, LLP, High Street Tower, 125 High Street, Boston, MA 02110 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>	

(54) Title: **AUTOMATED PAYMENT SYSTEM AND METHOD**

## (57) Abstract

Systems and methods for automated payment involve utilizing consumer payment authorization, clearing, and settlement systems to allow a merchant to reduce or eliminate an amount owed to another entity for services, products, and/or cash advances provided to the merchant. After a customer identifier (e.g., a credit, debit, smart, charge, payment, etc. card account number) is accepted as payment from the customer, information related to the payment is forwarded to a merchant processor. The merchant processor acquires the information related to the payment, processes that information, and forwards at least a portion of the payment to a receiver as payment for at least a portion of the amount owed by the merchant. The receiver receives the portion of the payment forwarded by the merchant processor and applies that portion to the amount owed by the merchant to reduce or eliminate that outstanding amount.



## AUTOMATED PAYMENT SYSTEM AND METHOD

### Cross-Reference to Related Application

This is a continuation-in-part of pending U.S. patent application serial no. 08/890,398 which was filed on July 9, 1997.

### Technical Field

5 This invention relates to systems and processes for automated payment for a service or product including repayment of a cash advance provided to a merchant via fees levied through an entity that processes customer payment transactions for the merchant.

### Background Information

Card (e.g., credit, debit, charge, smart, etc.) transactions generally involve at least merchants, merchant processors, issuers, and cardholders. Such transactions include  
10 authorization, clearing, and settlement processes, and may include the use of a system such as the VisaNet or Cirrus system to authorize, clear, and settle the card payment.

Repayment of cash advances including loans generally is performed by the payor sending periodic payments directly to another entity by post or by electronic funds transfer through the banking system. Fees for products and services generally are paid directly by an entity receiving  
15 the product and/or service to the provider of the product and/or service.

### Summary of the Invention

It is an object of the invention to provide for automated payment by a business entity based on fees levied on customer payment transactions between the business entity and its customers. The payment can be for a product, service, and/or cash advance provided to the  
20 business entity (e.g., a merchant such as a restaurant) by an organization that supplies various businesses with products, services, and/or cash advances. The organization can, for example, provide discounted business tools and resources such as payroll services, discounted office equipment and supplies, travel discounts, various employee benefit programs such as discount dental services, various professional services such as legal services, and marketing services. The  
25 business entity pays for the services, products, and/or cash advances supplied by the organization via a fee levied on card payments made by the business entity's customers. These card

- 2 -

transactions involve unique identifying account numbers (e.g., credit, debit, charge, payment, smart, etc. card numbers) provided to the entity by its customers. It also is an object of the invention for the organization to advance money to the business entity for the purpose of allowing the business to buy the goods and/or services that are offered or supplied by the organization (or  
5 any other goods and/or services), and then the business entity repays the advance via a fee levied on card payments made by the business entity's customers.

As an example of this aspect of the invention, the organization makes available to small businesses and similar merchants various products and/or services, including cash advances, for a fee, and the fee is paid to the organization based on customer payment transactions between the  
10 merchant and its customers. The organization could also advance money to the merchant for the purpose of, for example, allowing the merchant to buy the various products and/or services from the organization (or products and/or services offered by any other entity), and the advance is repaid by the merchant based on the merchant's customer payment transactions. The merchant can be, for example, a personal service beauty salon or a restaurant, and the providing  
15 organization can provide to the merchant certain tools and resources such as discounted advertising rates through a large advertiser. Whether or not the merchant takes advantage of the discounted advertising or any of the other products and/or services offered by the organization, the merchant, once signed up with the organization, owes the organization a fee for being provided with access to the array of products and/or services offered by the organization. This  
20 fee, and any other fee(s) connected with the merchant getting access to or actually using the offered products and/or services, is paid by the merchant to the organization (or to a representative of the organization or, generally, to a "fee receiver") via a fee levied on card payment transactions between the merchant and its customers. For example, the transaction may involve the purchase of a haircut from the beauty salon by a customer using a credit card as the  
25 means of payment to the salon for the haircut. During processing of the card transaction by a merchant processor, a portion of the purchase price of the haircut is diverted to the organization as (partial) payment for the fee owed to the organization by the salon. In the same manner, the salon can make payments on any outstanding cash advance, whether the advance originated from the organization or a third party.

30 It is a further object of the invention to provide an automated cash advance (e.g., loan) repayment system and process based on fees levied on payment transactions such as those

Attorney's Docket No.: JHN-001CPC

-3-

involving unique identifying account numbers (e.g., credit, debit, charge, payment, smart, etc. card numbers).

In accordance with the invention, a merchant processor is utilized whether the payment is to cover all or a portion of a fee due for a product and/or service or to cover all or a portion of an outstanding cash advance amount. The merchant processor may be, for example, a third party entity (i.e., an entity other than the merchant or the organization). As an example, with some credit cards, the merchant processor can be a third party. As another example, with some cards such as the American Express charge card, the merchant processor can be the same as (or at least closely affiliated with) the card issuer. In general, a "merchant processor" is any entity that acquires merchant transactions such as a bank or other financial institution, or that is dedicated to acquiring and processing merchant transactions. Acquiring merchant transactions generally means receiving payment information from a merchant or on behalf of a merchant, obtaining authorization for the payment from the card issuer, sending that authorization to the merchant, and then completing the transaction by paying the merchant, submitting the payment, and getting paid by the issuer. For this service, the merchant processor typically levies a fee on the merchant that is a percentage of the amount of the payment transaction. In general, the payment information forwarded to the merchant processor relates to a customer identifier submitted to the merchant as payment for some good(s) and/or service(s), and that identifier can be the account number associated with, for example, a debit card, a smart card, a credit card (e.g., a Visa or MasterCard card), a charge card (e.g., an American Express card), etc.

The invention thus relates to systems and processes for automated payment for a service, product, and/or cash advance provided to a merchant by the organization. The systems and processes of the invention utilize consumer payment transactions with the merchant to allow the merchant to pay off the service, product, and/or cash advance provided by the organization. Typically, a percentage of a consumer's payment to the merchant (e.g., by credit card) is used to pay what the merchant owes to the organization. In one embodiment of the present invention, a merchant, that has received a cash advance from the organization and/or that has been provided with certain services and/or products by the organization, accepts a customer-identifying account number (e.g., a credit, charge, payment, or debit card number) as payment from the customer and information related to the payment is forwarded to a merchant processor. Acceptance of this type of payment from the customer can be done, for example, at a merchant location (e.g., a retail

AMENDED SHEET

- 4 -

establishment), over the telephone, or electronically via, for example, the World Wide Web by the merchant or on behalf of the merchant. The merchant processor then acquires the information related to the payment transaction, processes that information, and forwards at least a portion of the transaction amount to the organization as repayment of at least a portion of the amount owed  
5 by the merchant for the goods, services, and/or cash advance provided to the merchant.

Alternatively, the payments may be accumulated until a predetermined amount is reached, and then at least a portion of the accumulated payments is forwarded to the organization (or its designee). In another embodiment, the merchant processor may periodically forward at least a portion of the payment(s) to the organization or designee. For example, the merchant processor  
10 may forward payment amounts every month, or based on an amount such as after each one thousand dollars (\$1000) worth of transactions. The organization or designee (e.g., a bank or other institution, or an entity collecting payments on behalf of the organization) receives the portion of the payment forwarded by the merchant processor and applies that amount to the amount owed by the merchant to reduce the outstanding amount whether it be owed by the  
15 merchant because of a product, service, and/or cash advance provided to the merchant.

A system according to the invention includes means for accepting a customer-identifying account number as payment from the customer and for forwarding information related to the payment to a merchant processor. In one embodiment, the merchant may use equipment provided by VeriFone Inc. of Redwood City, California, such as an electronic card swipe machine, to  
20 facilitate card transactions by customers. The merchant processor includes means for receiving the information related to the payment and means for forwarding a payment to an organization.

The invention thus provides an automated, easy, and efficient mechanism by which merchants that accept customer-identifying account numbers (e.g., credit cards) as payment for good(s) and/or service(s) can pay off amounts owed by the merchants for services, products,  
25 and/or cash advances provided to the merchants. The merchants use one or more already-familiar payment transaction processing systems to make the payments required by the provider of the services, products, and/or cash advances. The invention makes payment for advances, goods, and/or services simple and efficient for both the merchant and the organization.

The foregoing and other objects, aspects, features, and advantages of the invention will  
30 become more apparent from the following drawings, description, and claims.

- 5 -

Brief Description of the Drawings

In the drawings, like reference characters generally refer to the same parts throughout the different views. Also, the drawings are not necessarily to scale, emphasis instead generally being placed upon illustrating the principles of the invention.

5        FIGS. 1A and 1B are schematic illustrations of a payment transaction from authorization (FIG. 1A) to settlement (FIG. 1B).

FIG. 2 is a block diagram of a merchant processor making payment to both a merchant and an organization, in accordance with the invention.

FIG. 3A is a diagram of a merchant processor system according to the invention.

10        FIG. 3B is a diagram of a merchant location.



Attorney's Docket No.: JHN-001CPC

-6-

Description

Referring to FIGS. 1A and 1B, a purchase transaction (e.g., a credit card transaction) generally begins with a cardholder 10 providing a customer identifier (typically, a unique identifying account number such as that on a credit card such as a Visa or MasterCard card, a debit card, a smart card, a charge card such as an American Express card, etc.) to a merchant 20, as indicated by an arrow 12, for payment of goods and/or services purchased by the customer. The merchant can be any business that accepts such form of payment for the goods and/or services provided to customers by the business. The cardholder 10 might present the card to the merchant 20 in person, or the cardholder 10 might provide the card number to the merchant over the telephone or electronically by computer (e.g., via the World Wide Web, WWW). Also, the cardholder 10 might provide the card number to an entity acting on behalf of the merchant such as a WWW provider that sets up and maintains the merchant's Web page(s). However the customer identifier (e.g., card number) gets to the merchant or the merchant's agent, authorization must be obtained before the payment can be accepted and the purchase transaction completed.

Authorization, as shown in FIG. 1A, involves an authorization request going to a merchant processor 30, as indicated by an arrow 22. The request generally gets to the merchant processor 30 electronically by, for example, transmission through the telephone system and/or some other network (e.g., the Internet and/or an intranet). The merchant processor 30 (also known as an acquirer because it acquires merchant transactions) then routes the authorization request to a card issuer 50 via a network 40, as indicated by arrows 32 and 42. In some embodiments, the merchant processor 30 (300 in FIGS. 2 and 3A) is the bank of the merchant 20, and the card issuer 50 is the cardholder's bank. The routing generally is performed electronically in a manner mentioned above (i.e., via one or more public and/or private networks). The network 40 may be, for example, the VisaNet system. Other examples of the network 40 include debit card processing network systems (e.g., Cirrus), the American Express card network, and the Discover (Novus) card network. It may be possible to bypass the network 40 and send the authorization request directly from the merchant processor 30 to the card issuer 50. In some instances, the card issuer 50 also performs the function of acquiring merchant transactions (American Express is an example). Also, the merchant processor 30 and the card issuer 50 can be merged, and the authorization request will then go only to the merchant

AMENDED SHEET

Attorney's Docket No.: JHN-001CPC

-7-

processor 30 which itself then can approve or disapprove the request because the merchant processor 30 and the card issuer 50 are now the same entity. In the case where the network 40 is used and the card issuer 50 and the merchant processor 30 are separate (organizationally and/or physically) entities, the card issuer 50 receives the authorization request via the network 40 and either approves or disapproves the request. An example of when the card issuer 50 may disapprove the authorization request is when the cardholder 10 has reached the maximum limit on the card or if the card number has been fraudulently obtained. Assuming the request is approved, the card issuer 50 sends approval of the authorization to the merchant processor 30 via the network 40, as indicated by arrows 44 and 34. The merchant processor 30 then passes on the authorization approval to the merchant, as indicated by an arrow 24. With the approval, the second part of the card transaction can now occur. This return path (i.e., arrows 44, 34, and 24) also can be accomplished by electronic transmission through one or more private and/or public network systems. In general, all of the arrows in FIGS. 1A, 1B, and 2 represent electronic transmissions, except possibly for arrows 12, 22, 24, 26, 52, and 54 which may involve other types of transmission such as physical delivery (e.g., a card handed over by the cardholder/customer 10) or post (e.g., a bill sent to the cardholder 10 via the U.S. Postal Service or other carrier) or by telephone.

Referring to FIG. 1B, to complete the purchase transaction, the dollar amount of the customer's purchase is forwarded to the merchant processor 30 by the merchant 20, as indicated by an arrow 26. The merchant processor 30 pays the merchant 20 some amount less than the amount submitted to the merchant processor 30. The merchant processor 30 typically charges a fee, often referred to as a discount rate, for processing the purchase transaction. For example, the customer's purchase may have been \$100, and with a discount rate of 1.9%, the merchant 20 is paid \$98.10 (i.e., \$100 less the 1.9% discount rate) by the merchant processor 30. The merchant processor 30 submits the entire amount of the customer's purchase to the card issuer 50 via the network 40, as indicated by arrows 36 and 46. Again, the network 40 may be eliminated, and the merchant processor and card issuer functions may be contained in one entity. In the case where the network 40 is included and the merchant processor and card issuer functions are separate, the card issuer 50, via the network 40, pays the merchant processor 30 some amount less than the amount submitted to the card issuer 50 by the merchant processor 30, as indicated by arrows 48

AMENDED SHEET

Attorney's Docket No.: JHN-001CPC

-7A-

and 38. This reduced amount reflects another fee levied on the transaction by the card issuer 50, often referred to as an interchange fee. The interchange fee is often part of the discount rate.

AMENDED SHEET

WO 99/03076

PCT/US98/13293

- 8 -

having an account maintained by the merchant 20) some amount less than the customer's original purchase amount, as indicated by an arrow 28. For example, with an original customer purchase of \$100, and with an interchange fee of 1.4%, the merchant processor 30 is paid \$98.60 (i.e., \$100 less the 1.4% interchange fee) by the card issuer 50. This amount is further reduced by the merchant processor's fee. Thus, in this \$100 original customer purchase example, the merchant 20 is paid \$98.10 by the merchant processor 30, the merchant processor 30 makes \$0.50, and the card issuer makes \$1.40. Stated another way, the merchant 20 pays 1.9% for the ability to offer customers the convenience of paying by card, and that 1.9% fee or surcharge is allocated to the merchant processor 30 (0.5%) and the card issuer (1.4%) for providing the merchant 20 with that ability.

The card issuer 50 bills the customer or cardholder 10 for the full amount of the original purchase (e.g., \$100), and the cardholder 10 is responsible for paying that amount, plus any interest and other fees, in full or in installment payments. Also, when the network 40 is used, both the merchant processor 30 and the card issuer 50 generally pay a fee to the provider of the network 40. For example, in the case of VisaNet, the merchant processor might pay \$0.069 to VisaNet as a card service fee, and the card issuer 50 might pay VisaNet \$0.059 as a card service and transaction fee. These payments by the merchant processor 30 and the card issuer 50 to the provider of the network 40 reduce the amount made off of the surcharge (e.g., 1.9%) imposed on the merchant 20.

Having described the environment in which the invention operates with reference to FIGS. 1A and 1B, the automated payment system and process according to the invention will now be described with reference to FIGS. 2, 3A, and 3B.

Referring to FIG. 2, an organization 60 provides an advance (e.g., a loan) to the merchant 20, as indicated by an arrow 62, and/or the organization 60 provides to the merchant 20 various products, services, and/or business tools and resources such as, for example, payroll services, discounted office equipment and supplies, travel discounts, various employee benefit programs such as discount dental services, various professional services such as legal services, and marketing services, as also indicated by the arrow 62. The advance can be for the purpose of allowing the merchant 20 to buy, and/or have access to, the various products, services, and/or business tools and resources supplied by the organization 60, or the merchant 20 can use the advance for another purpose. The various products, services, and/or business tools and resources

- 9 -

supplied by the organization 60 to the merchant 20 do not include the card processing services normally performed by a merchant processor.

If the cash advance is made, the merchant 20 then is required to pay back at least the advanced amount and usually additional amounts such as fees associated with the advance.

5 Currently, the merchant 20 typically pays the advance back in periodic installments (e.g., equal monthly payments over five years). The merchant 20 may make these payments to the organization 60 or to some other payment receiver. In FIG. 2, the payment receiver is identified as the organization 60. In accordance with the invention, a purchase transaction occurs as indicated in FIG. 1B except that the final step where the merchant processor pays the merchant is  
10 altered. That is, the payment indicated by the arrow 28 is altered. The invention involves a merchant processor 300 designed to pay a portion of what would normally go to the merchant 20 to the organization 60 as payment of at least a portion of the amount owed by the merchant 20 for the service, product, and/or cash advance that was provided to the merchant 20, as indicated by an arrow 29. The organization 60 then receives that portion of the payment forwarded by the  
15 merchant processor 300 and applies it to the outstanding amount owed by the merchant to reduce that amount. The merchant processor 300 thus pays the merchant 20 some amount less than what the merchant 20 would receive in the arrangement of FIG. 1B, as indicated by an arrow 27 in FIG. 2. For example, carrying on with the example introduced above with reference to FIGS. 1A and 1B, instead of paying \$98.10 to the merchant 20 on a \$100 original card purchase, the  
20 merchant processor 300 might send \$88.10 to the merchant 20 and the other \$10.00 to the organization 60.

Whether or not a cash advance is provided to the merchant 20, if the organization 60 provides to the merchant 20 the various products, services, and/or business tools and resources, the merchant 20 then is required to pay a fee to the organization 60. In general, whether or not  
25 the merchant 20 takes advantage of the various products, services, and/or business tools and resources offered by the organization 60, the merchant 20, once signed up with the organization 60, owes the organization 60 a fee for being provided with access to the array of products and/or services offered by the organization 60. Currently, the merchant 20 typically pays the fee in one lump sum to the organization 60 or to some other fee receiver. In accordance with the invention,  
30 a purchase transaction occurs as indicated in FIG. 1B except that the final step where the merchant processor pays the merchant is altered. That is, the payment indicated by the arrow 28

- 10 -

is altered. The invention involves a merchant processor 300 designed to pay a portion of what would normally go to the merchant 20 to the organization 60 (or a fee receiver) as payment of at least a portion of the fee owed by the merchant, as indicated by the arrow 29. The organization 60 then receives that portion of the payment forwarded by the merchant processor 300 and  
5 applies it to the fee owed to the organization 60 by the merchant to reduce or eliminate that outstanding amount. The merchant processor 300 thus pays the merchant 20 some amount less than what the merchant 20 would receive in the arrangement of FIG. 1B, as indicated by an arrow 27 in FIG. 2. For example, carrying on with the example introduced above with reference to FIGS. 1A and 1B, instead of paying \$98.10 to the merchant 20 on a \$100 original card purchase,  
10 the merchant processor 300 might send \$88.10 to the merchant 20 and the other \$10.00 to the organization 60.

In accordance with the invention, there can be a number of variations on how and when the merchant processor 300 pays the organization 60. For example, the merchant processor 300 can accumulate the payments received from the card issuer 50 (via arrows 48 and 38) until a  
15 predetermined dollar amount is reached, and then the merchant processor 300 can forward at least a portion of the accumulated payments to the organization 60. Also, as another example, the merchant processor 300 can periodically forward payment to the organization 60, such as upon every other payment received from the card issuer 50.

Referring to FIG. 3A, the merchant processor 300 according to the invention typically  
20 includes at least a processor 302, memory 304, an input/output (I/O) device 306, a merchant accounts database 308, and a bus 310 or other means for allowing these components to communicate. The I/O module 306 allows the merchant processor 300 to communicate electronically with the other components (e.g., the merchant 20, the network 40, the card issuer 50, and the organization 60) in the card transaction processing system shown in the drawings.  
25 The processor 302 and the memory 304 cooperate with each other and with the other components of the merchant processor 300 to perform all of the functionality described herein. In one embodiment, the merchant processor 300 executes appropriate software to perform all of the functionality described herein. In an alternative embodiment, some or all of the functionality described herein can be accomplished with dedicated electronics hard-wired to perform the  
30 described functions. The merchant accounts database 308 can include information identifying all merchants 20 with which the merchant processor 300 is authorized to do business (e.g., at least a

- 11 -

plurality of unique merchant code numbers), and it also can include information about which organization 60 is associated with each authorized merchant 20 and how (e.g., dollar amounts and frequency) payments are to be made to the organizations 60 by the merchant processor 300. The merchant processor 300 according to the invention can be an appropriately programmed  
5 computer such as a mainframe, minicomputer, PC, or Macintosh computer, or it can include a plurality of such computers cooperating to perform the functionality described herein. Similarly, the other components of the card transaction system (e.g., the merchant 20, the network 40, the card issuer 50, and the organization 60) according to the invention typically include one or more appropriately programmed computers for implementing the functionality described herein.

10 Referring to FIG. 3B, the merchant 20 typically includes at least one computer unit 312, such as a microprocessor and associated peripherals, that communicates over a bus 314 with a consumer data input device 316, a transaction data input device 318, memory 320, and an input/output (I/O) device 322. The consumer data input device 316 is located at the point-of-sale to a consumer of merchandise or services from the merchant. The device 316 can include a  
15 keyboard for use to enter a consumer's account number/identifier, or alternatively it can include a magnetic card reader for reading a magnetic stripe on a plastic card inserted into the reader. With such a magnetic stripe card, the stripe is encoded with the identifier (e.g., the customer's Visa credit card account number). When such a plastic card is used, the device 316 also may include a keyboard for entry of a personal identification number (PIN) for verifying against a code stored in  
20 or on the card. The transaction data input device 318 also is located at the point-of-sale, and it typically includes a keyboard or the like for use by, for example, a sales clerk to enter the dollar amount of the merchandise or service purchased by the customer and possibly other related information. The device 318 could include a cash register. In some embodiments, the devices 316 and 318 can share a single keyboard. The consumer and transaction data entered through the  
25 devices 316 and 318 may be temporarily stored in the memory 320. The memory 320 also may include merchant data along with software to direct operation of the computer 312. The merchant data typically will include at least a merchant code number to identify the merchant, and merchant data also may include information indicating the time or location of the sale and/or the sales clerk involved in the purchase transaction, for example. The merchant 20 may have more  
30 than one point-of-sale locations and each such location can be equipped with consumer and transaction data input devices 316 and 318. Similarly, memory 320 and I/O devices 322 can be

- 12 -

replicated at each point-of-sale location at the merchant 20. In one embodiment, only the devices 316 and 318 are replicated at the merchant 20 such that only one computer 312 is needed by each single merchant location. VeriFone Inc. of Redwood City, California, for example, provides such merchant-location equipment.

5 Referring now to both FIG. 3A and FIG. 3B, the merchant processor 300 and the merchant 20 can communicate through the I/O devices 306 and 322. These devices 306 and 322 can be modems, for example.

While only one merchant 20 and one organization 60 are shown in the drawings, it should be understood that in general a plurality of merchants 20 will interact with the merchant processor 300, and the merchant processor 300 could interact with one or more organizations 60, in  
10 accordance with the invention. The different merchants 20 generally will have varying outstanding amounts owed to one or more of the various organizations 60. The invention has been shown and described with reference to one merchant 20 and one organization 60 for simplicity and ease of understanding. Also, as stated previously, the merchant processor 300 and  
15 the card issuer 50 can be separate entities (as is generally the case with Visa card processing) or the same entity, or at least affiliated entities, (as is generally the case with American Express card processing).

Variations, modifications, and other implementations of what is described herein will occur to those of ordinary skill in the art without departing from the spirit and the scope of the  
20 invention as claimed. Accordingly, the invention is to be defined not by the preceding illustrative description but instead by the spirit and scope of the following claims.

What is claimed is:



- 13 -

Claims

- 1           1. A method for automated payment for a service, comprising:
  - 2           (A) providing the service to an entity for a fee; and
  - 3           (B) receiving at least a portion of the fee for the service based on at least one payment  
4 transaction between the entity and at least one customer of the entity by a process comprising:
    - 5           (i) accepting a customer identifier as payment from the customer and forwarding  
6 information related to the payment to a merchant processor;
    - 7           (ii) at the merchant processor, acquiring the information related to the payment  
8 and forwarding at least a portion of the payment to a service fee receiver to pay at least a portion  
9 of the fee for the service provided to the entity; and
    - 10           (iii) at the service fee receiver, receiving the portion of the payment forwarded by  
11 the merchant processor and applying that portion to the fee for the service provided to the entity.
- 1           2. The method of claim 1 wherein the accepting step comprises accepting a credit card  
2 number as the customer identifier.
- 1           3. The method of claim 1 wherein the accepting step comprises accepting a debit card  
2 number as the customer identifier.
- 1           4. The method of claim 1 wherein the accepting step comprises accepting a smart card  
2 including the customer identifier.
- 1           5. The method of claim 1 wherein the accepting step comprises accepting a charge card  
2 number as the customer identifier.
- 1           6. The method of claim 1 wherein the accepting step comprises accepting the customer  
2 identifier at a merchant location.
- 1           7. The method of claim 1 wherein the accepting step comprises electronically accepting  
2 the customer identifier.
- 1           8. The method of claim 1 wherein the steps performed at the merchant processor further  
2 comprise accumulating the payments until a predetermined amount is reached and then  
3 forwarding at least a portion of the accumulated payments to the service fee receiver.
- 1           9. The method of claim 1 wherein the steps performed at the merchant processor  
2 comprise periodically forwarding at least a portion of the payment to the service fee receiver.

- 14 -

1           10. The method of claim 1 wherein the providing step comprises providing the service to  
2 the entity which comprises a merchant.

1           11. A method for automated payment for a product, comprising:

2           (A) providing the product to an entity for a fee; and

3           (B) receiving at least a portion of the fee for the product based on at least one payment  
4 transaction between the entity and at least one customer of the entity by a process comprising:

5                   (i) accepting a customer identifier as payment from the customer and forwarding  
6 information related to the payment to a merchant processor;

7                   (ii) at the merchant processor, acquiring the information related to the payment  
8 and forwarding at least a portion of the payment to a product fee receiver to pay at least a portion  
9 of the fee for the product provided to the entity; and

10                   (iii) at the product fee receiver, receiving the portion of the payment forwarded by  
11 the merchant processor and applying that portion to the fee for the product provided to the entity.

1           12. The method of claim 11 wherein the accepting step comprises accepting a credit card  
2 number as the customer identifier.

1           13. The method of claim 11 wherein the accepting step comprises accepting a debit card  
2 number as the customer identifier.

1           14. The method of claim 11 wherein the accepting step comprises accepting a smart card  
2 including the customer identifier.

1           15. The method of claim 11 wherein the accepting step comprises accepting a charge card  
2 number as the customer identifier.

1           16. The method of claim 11 wherein the accepting step comprises accepting the customer  
2 identifier at a merchant location.

1           17. The method of claim 11 wherein the accepting step comprises electronically accepting  
2 the customer identifier.

1           18. The method of claim 11 wherein the steps performed at the merchant processor  
2 further comprise accumulating the payments until a predetermined amount is reached and then  
3 forwarding at least a portion of the accumulated payments to the product fee receiver.

1           19. The method of claim 11 wherein the steps performed at the merchant processor

- 15 -

2 comprise periodically forwarding at least a portion of the payment to the product fee receiver.

1 20. The method of claim 11 wherein the providing step comprises providing the product  
2 to the entity which comprises a merchant.

1 21. A system for automated payment for a service, comprising:  
2 means for accepting a customer identifier as payment from a customer and for forwarding  
3 information related to the payment to a merchant processor, wherein an entity associated with the  
4 payment owes a fee for a service provided to the entity; and  
5 at the merchant processor, means for receiving the information related to the payment and  
6 means for forwarding to a service fee receiver at least a portion of the payment to pay at least a  
7 portion of the fee for the service provided to the entity.

1 22. The system of claim 21 wherein the accepting means comprises means for accepting a  
2 credit card number as the customer identifier.

1 23. The system of claim 21 wherein the accepting means comprises means for accepting a  
2 debit card number as the customer identifier.

1 24. The system of claim 21 wherein the accepting means comprises means for accepting a  
2 smart card including the customer identifier.

1 25. The system of claim 21 wherein the accepting means comprises means for accepting a  
2 charge card number as the customer identifier.

1 26. The system of claim 21 wherein the accepting means comprises means for accepting  
2 the customer identifier at a merchant location.

1 27. The system of claim 21 wherein the accepting means comprises means for  
2 electronically accepting the customer identifier.

1 28. The system of claim 21 wherein the means at the merchant processor further comprise  
2 means for accumulating the payments until a predetermined amount is reached and means for  
3 forwarding at least a portion of the accumulated payments to the service fee receiver.

1 29. The system of claim 21 wherein the forwarding means at the merchant processor  
2 comprises means for periodically forwarding the portion of the payment to the service fee  
3 receiver.

1 30. The system of claim 21 wherein the forwarding means at the merchant processor

- 16 -

2 comprises means for forwarding to the service fee receiver the portion of the payment which  
3 comprises a percentage of the payment.

1 31. The system of claim 21 wherein the entity comprises a merchant.

1 32. A system for automated payment for a product, comprising:

2 means for accepting a customer identifier as payment from a customer and for forwarding  
3 information related to the payment to a merchant processor, wherein an entity associated with the  
4 payment owes a fee for a product provided to the entity; and

5 at the merchant processor, means for receiving the information related to the payment and  
6 means for forwarding to a product fee receiver at least a portion of the payment to pay at least a  
7 portion of the fee for the product provided to the entity.

1 33. The system of claim 32 wherein the accepting means comprises means for accepting a  
2 credit card number as the customer identifier.

1 34. The system of claim 32 wherein the accepting means comprises means for accepting a  
2 debit card number as the customer identifier.

1 35. The system of claim 32 wherein the accepting means comprises means for accepting a  
2 smart card including the customer identifier.

1 36. The system of claim 32 wherein the accepting means comprises means for accepting a  
2 charge card number as the customer identifier.

1 37. The system of claim 32 wherein the accepting means comprises means for accepting  
2 the customer identifier at a merchant location.

1 38. The system of claim 32 wherein the accepting means comprises means for  
2 electronically accepting the customer identifier.

1 39. The system of claim 32 wherein the means at the merchant processor further comprise  
2 means for accumulating the payments until a predetermined amount is reached and means for  
3 forwarding at least a portion of the accumulated payments to the product fee receiver.

1 40. The system of claim 32 wherein the forwarding means at the merchant processor  
2 comprises means for periodically forwarding the portion of the payment to the product fee  
3 receiver.

Attorney's Docket No.: JHN-001CPC

-17-

1           41. The system of claim 32 wherein the forwarding means at the merchant processor  
2 comprises means for forwarding to the product fee receiver the portion of the payment which  
3 comprises a percentage of the payment.

1           42. The system of claim 32 wherein the entity comprises a merchant.

1           43. A method for automated repayment of a cash advance, comprising:

2           (A) providing the cash advance to an entity; and

3           (B) receiving at least a portion of the cash advance based on at least one payment  
4 transaction between the entity and at least one customer of the entity by a process comprising:

5                   (i) accepting a customer identifier as payment from the customer and forwarding  
6 information related to the payment to a merchant processor; and

7                   (ii) at the merchant processor, acquiring the information related to the payment  
8 and forwarding at least a portion of the payment to repay at least a portion of the cash advance  
9 provided to the entity.

10          44. The method of claim 43 wherein the accepting step comprises accepting a credit card  
11 number as the customer identifier.

1          45. The method of claim 43 wherein the accepting step comprises accepting a debit card  
2 number as the customer identifier.

1          46. The method of claim 43 wherein the accepting step comprises accepting a smart card  
2 including the customer identifier.

1          47. The method of claim 43 wherein the accepting step comprises accepting a charge  
2 card number as the customer identifier.

AMENDED SHEET

Attorney's Docket No.: JHN-001CPC

-17A-

1 48. The method of claim 43 wherein the accepting step comprises accepting the customer  
2 identifier at a merchant location.

1 49. The method of claim 43 wherein the accepting step comprises electronically  
2 accepting the customer identifier.

1 50. The method of claim 43 wherein the steps performed at the merchant processor  
2 further comprise accumulating the payments until a predetermined amount is reached and then  
3 forwarding at least a portion of the accumulated payments.

1 51. The method of claim 43 wherein the steps performed at the merchant processor  
2 comprise periodically forwarding at least a portion of the payment.

1 52. The method of claim 43 wherein the providing step comprises providing the cash  
2 advance to the entity which comprises a merchant.

1 53. A system for automated repayment of a cash advance, comprising:  
2 means for accepting a customer identifier as payment from a customer and for forwarding  
3 information related to the payment to a merchant processor, wherein an entity associated with the  
4 payment was provided with the cash advance; and

5 at the merchant processor, means for receiving the information related to the payment and  
6 means for forwarding at least a portion of the payment to repay at least a portion of the cash  
7 advance provided to the entity.

1 54. The system of claim 53 wherein the accepting means comprises means for accepting  
2 a credit card number as the customer identifier.

1 55. The system of claim 53 wherein the accepting means comprises means for accepting  
2 a debit card number as the customer identifier.

AMENDED SHEET

Attorney's Docket No.: JHN-001CPC

-17B-

1 56. The system of claim 53 wherein the accepting means comprises means for accepting  
2 a smart card including the customer identifier.

1 57. The system of claim 53 wherein the accepting means comprises means for accepting  
2 a charge card number as the customer identifier.

1 58. The system of claim 53 wherein the accepting means comprises means for accepting  
2 the customer identifier at a merchant location.

1 59. The system of claim 53 wherein the accepting means comprises means for  
2 electronically accepting the customer identifier.

1 60. The system of claim 53 wherein the means at the merchant processor further  
2 comprises means for accumulating the payments until a predetermined amount is reached and  
3 means for forwarding at least a portion of the accumulated payments.

1 61. The system of claim 53 wherein the forwarding means at the merchant processor  
2 comprises means for periodically forwarding the portion of the payment.

1 62. The system of claim 53 wherein the forwarding means at the merchant processor  
2 comprises means for forwarding the portion of the payment which comprises a percentage of the  
3 payment.

1 63. The system of claim 53 wherein the entity comprises a merchant.

1/5

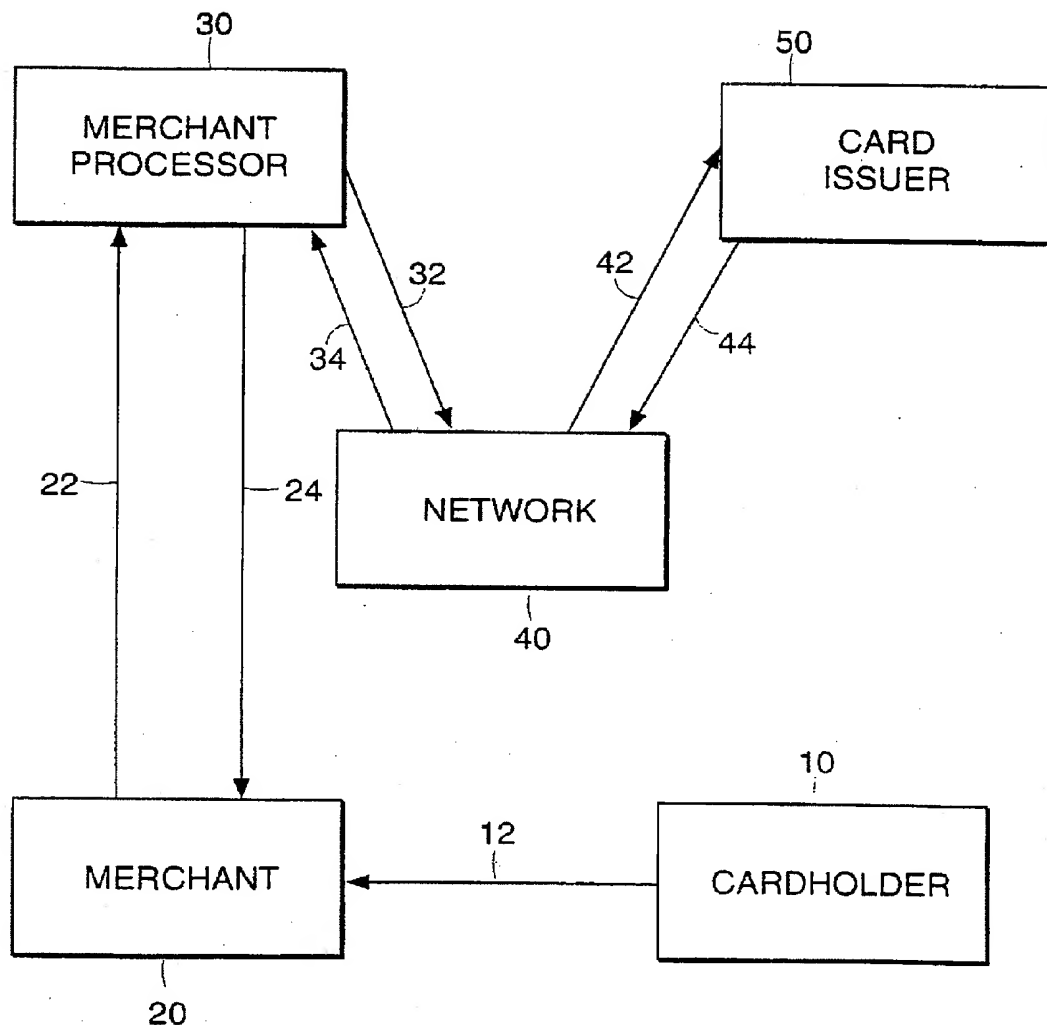


FIG. 1A



2/5

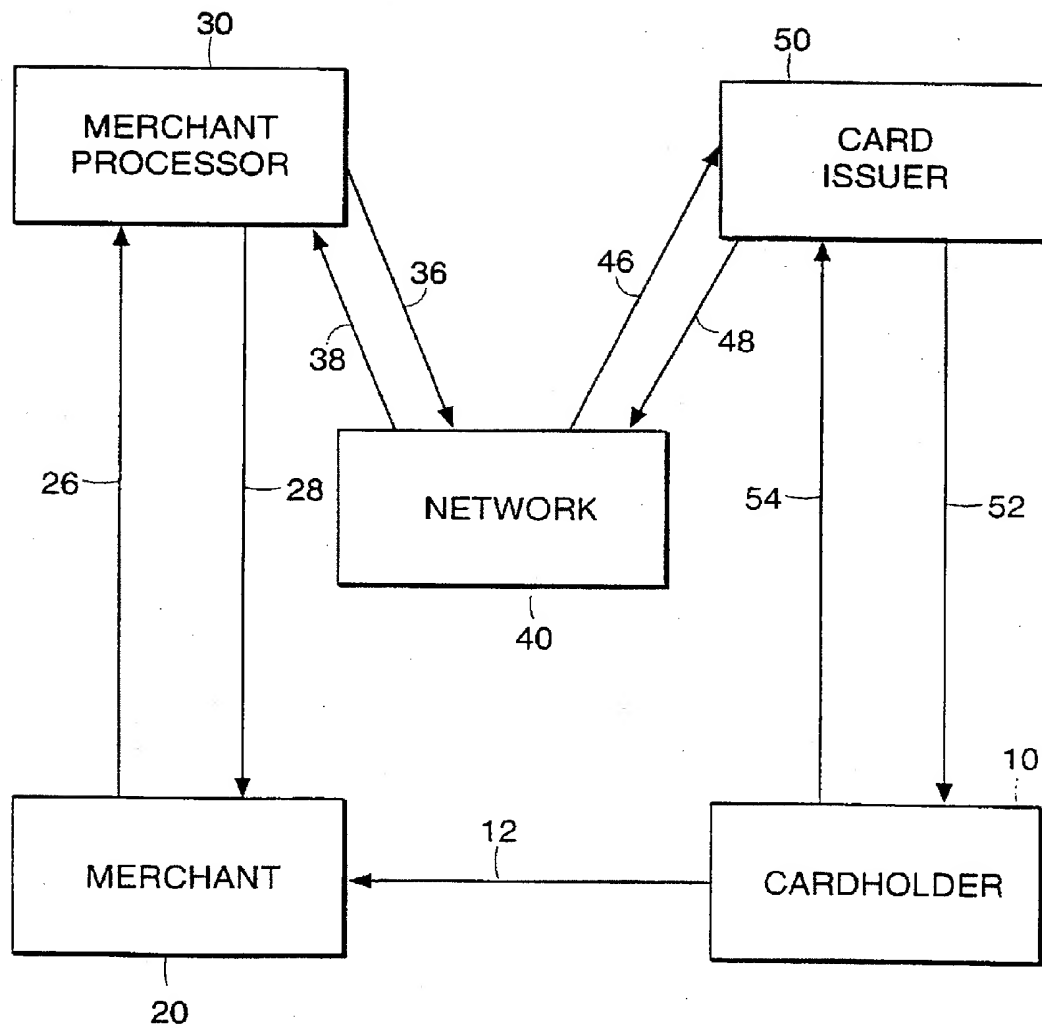


FIG. 1B

3/5

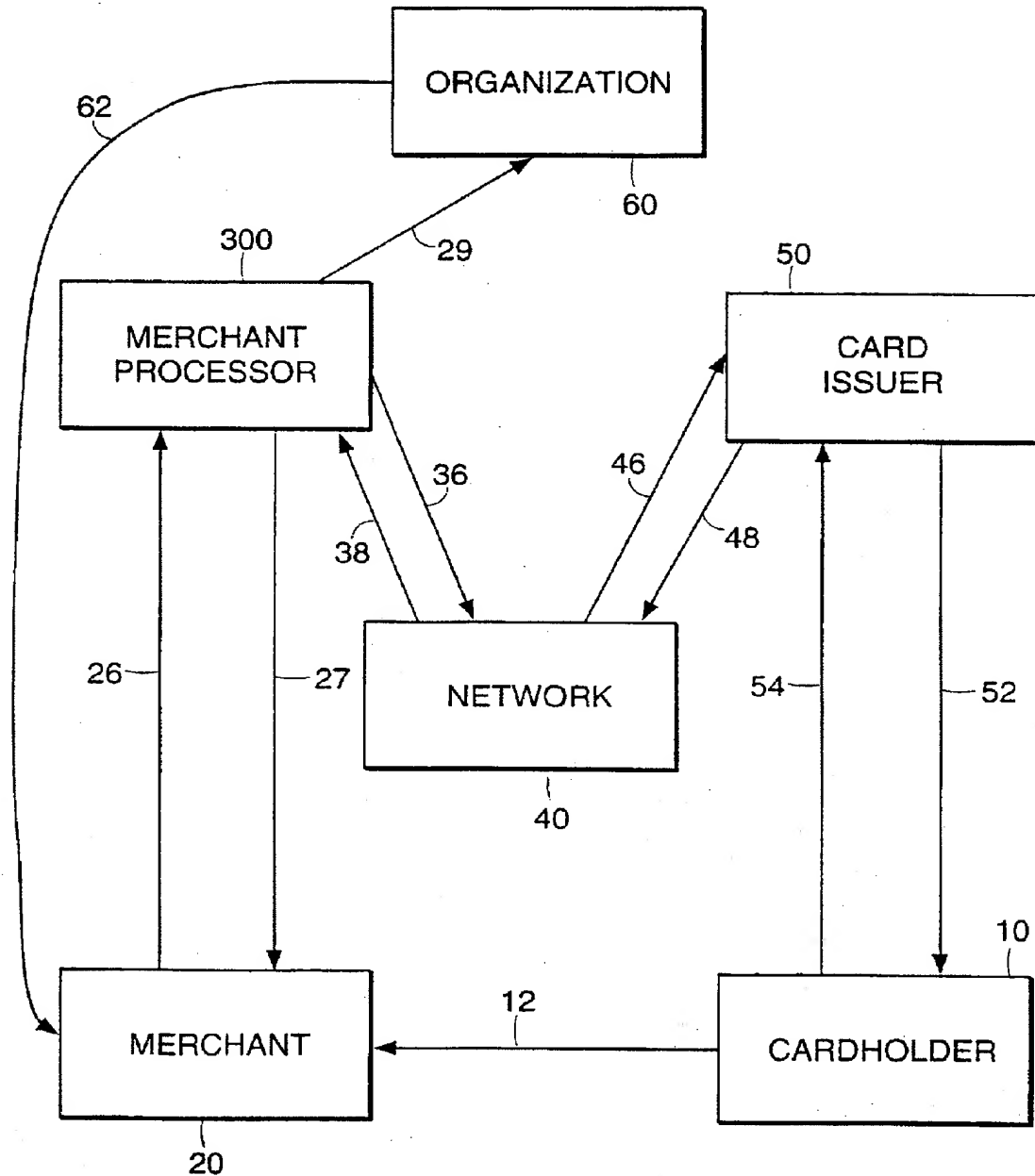


FIG. 2

4/5

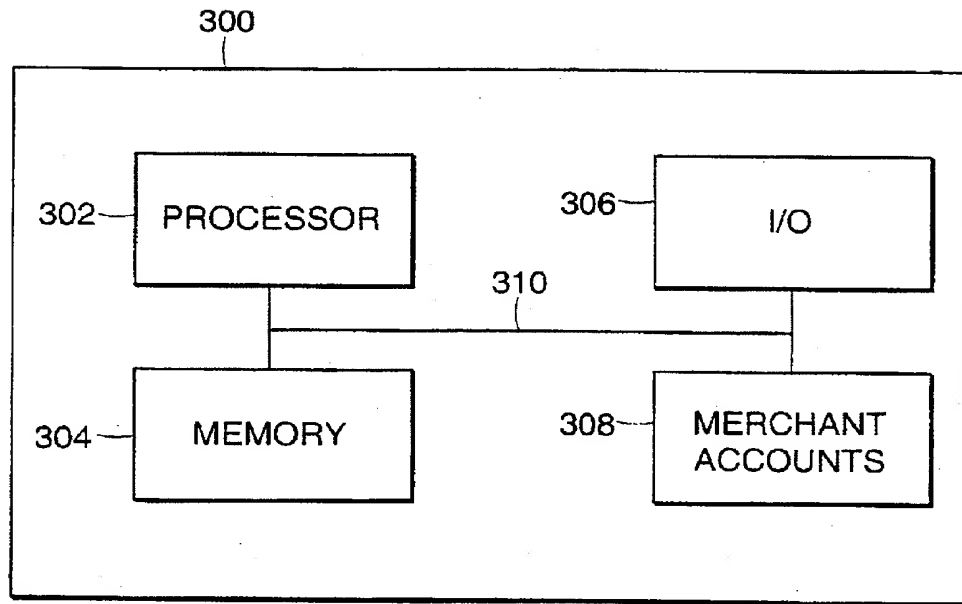


FIG. 3A

5/5

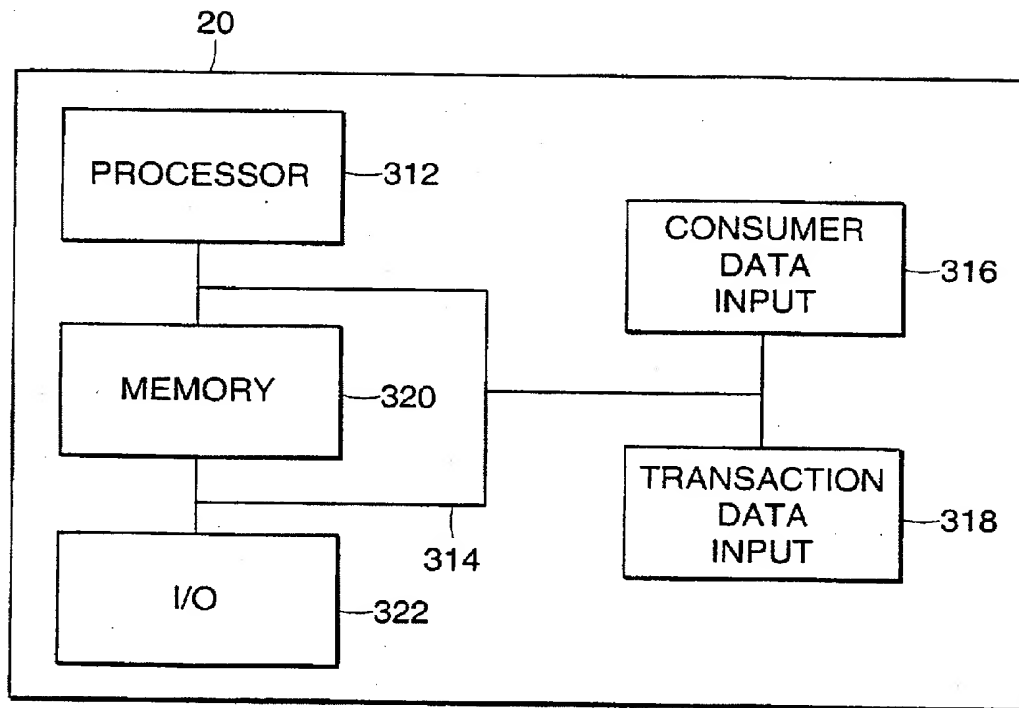


FIG. 3B